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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/717,414

11/21/2000

James M. Amster

2000-0518

6495

7590

09/03/2004

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EXAMINER

LEVITAN, DMITRY

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 09/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/717,414

Applicant(s)

AMSTER ET AL.

Examiner

Dmitry Levitan

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 7 is/are rejected.
- 7) ☒ Claim(s) 3-6 and 8-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

***Specification***

1. The disclosure is objected to because of the following informalities:
  - a. on page 5, the disclosure of the curve fitting process is unclear;
  - b. on page 5, Heavyside function was introduced but not disclosed;
  - c. on page 5, the definition of transport parameters d and e is unclear, because it is not understood, if these parameters are average, maximum or time dependent.Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark (US 6,741,569) in view of Kelley (US 6,147,998).

Clark substantially teaches all the limitations of claims 1, 2 and 7.

A method and a system for monitoring a packet transmission path to determine voice quality in the VoIP path (Fig. 1 and 2, 6:53-67 and 7:1-2):

Measuring packets delay and loss across the path (RTP layer 304 on Fig. 3 and 7:3-20);

Establishing an analytic value for voice quality impairment due to the measured packet delay (delay model 403 on Fig. 4 and 8:40-45);

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Establishing an analytic value for voice quality impairment due to the measured packet loss (packet loss model 401 on Fig. 4 and 8:25-32);

Deriving a measure of overall voice quality associated with the path in accordance with the algebraic sum of analytic values for voice quality impairment due to the measured packet loss and delay (combined quality degradation estimate 404 on Fig. 4 and 8:47-51).

Clark does not teach injecting probe packets in the transmission path.

Kelley teaches injecting probe packets in the transmission path (inserting test cells 4:6-15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add injecting probe packets in the transmission path of Kelley to the system of Clark to make the path test independent from voice traffic, enabling the quality tests before actual voice connection.

In addition, regarding claim 7, Clark teaches a processor to perform the operation described above (inherently part of the system, because a processor is essential to perform the disclosed analytic computations).

Regarding claim 2, Clark teaches performing the operation described above at various times to obtain measurements of the voice quality at different intervals (Fig. 7 and 6:33-49).

#### ***Allowable Subject Matter***

3. Claims 3-6 and 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Grabelsky      US006678250B1      Method and system for monitoring real-time networks.

Hardy            US006370120B1      Method and system for evaluating the quality of packet-switched voice signals.

Ishii            US006778493B1      Real-time media content synchronization and transmission in packet network.

Yaakov          US006748433B1      Method and system for controlling quality of service over network.

Zhang           US006775240B1      Method and system for measuring quality of communication over a packet network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

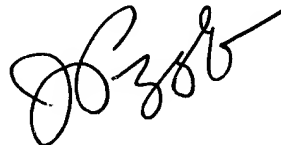
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dmitry Levitan  
Patent Examiner.  
08/31/04



**JOHN PEZZLO**  
**PRIMARY EXAMINER**